WATERFOWL

Duck Breeding Populations

Breeding population estimates are made each year for 10 key species of ducks in the principal breeding areas of Alaska, Canada, and the northcentral United States (Table 4.1, Fig. 4.1). Surveys are conducted in May and early June by U.S. Fish and Wildlife Service (USFWS), Canadian Wildlife Service, provincial and state conservation agency personnel. Ducks are counted from fixed-wing aircraft on the same transects each year. Estimates of ducks and ponds seen from the air are corrected for visibility bias by conducting ground counts on a sample of the transects. The estimates in Table 4.1 are not the entire continental breeding populations of these ducks; a portion of each population (an estimated 20% for mallards) nests outside the surveyed areas.

Although numbers of breeding ducks have fluctuated substantially from year to year, trend analysis suggests that total duck numbers are stable. This stable trend, however, is the result of increasing numbers of some species (e.g., gadwall, green-winged teal, shovelers and blue-winged teal) and decreasing numbers of others (e.g., pintails and scaup). There is also a slight decreasing trend in numbers of breeding mallards, but this trend is less pronounced due to the large numbers of breeding mallards seen in the late 1990's. Despite the improvements in duck numbers in the 1990's, there are still concerns about the long-term loss of both wetland and upland habitat in the prairie pothole region and the long-term outlook for duck populations in the future.

Duck populations have fluctuated substantially over time. The drought of the 1980's pushed many populations to near record low levels. The resiliency and adaptability of these birds, however, was dramatically illustrated when most duck populations rebounded after water returned to the prairies in the 1990's. Pintails and scaup were exceptions to this rule; pintails because drought continued to plague their primary nesting areas in Alberta and scaup for reason related to nutritional deficiencies on migration areas. Duck populations will continue to fluctuate in the future as numbers of wetlands across the landscape of north-central North America rise and fall with the vagaries of the weather

Giant Canada Goose Population

Giant Canada geese nested throughout Iowa prior to Euro-American settlement but were extirpated from most of the Midwest, including Iowa, by 1900. The giant Canada goose restoration program initiated by the IDNR in 1964 has succeeded in restoring this species to much of its former nesting range in Iowa (see Giant Canada Goose Restoration). The giant Canada goose population in Iowa has exhibited steady growth for the past 30 years (Fig. 4.2). Each summer, biologists and technicians estimate the numbers of adult Canada geese and young produced within their wildlife units. To obtain a statistically valid estimate of this population, an aerial survey is also periodically conducted. The results of the aerial survey in 2001 indicated that the population was unchanged from 2000: 53,839 (+ 9,653) in 2001 compared to 54,519 (+ 8,490) in 2000. The population estimates made by wildlife biologists have been very similar to the population estimates obtained from the aerial survey. This suggests that the biologists'

estimates accurately represented the growth rate and size of this population in past years.

Waterfowl Harvests

Waterfowl harvests and hunter activity in Iowa are estimated annually by the USFWS (Table 4.2). Harvest estimates are calculated by combining the results of 2 surveys: 1) a survey of randomly selected hunters from the Harvest Information Program (HIP) registrants to estimate total waterfowl killed, and 2) a survey that solicits duck wings and goose tails to determine the species composition of the harvest.

Iowa's duck harvests have fluctuated substantially since 1961. The lowest harvests of all ducks and mallards occurred in the early 1960's, years of low duck populations and restrictive regulations. The highest duck harvest was in 1979, a year with good duck numbers and, perhaps more importantly, excellent habitat conditions in Iowa due to above normal rainfall in late summer and early fall. Duck harvests began to decline in 1985, bottoming out in 1988 and 1989. Reasons for reduced harvests included smaller fall flights, shorter seasons, reduced bag limits, fewer hunters and poor local habitat conditions. Duck harvests have increased in recent years as a result of improvements in duck numbers, liberal hunting regulations and increases in numbers of active hunters.

Iowa's Canada goose harvest was relatively constant during 1967-85, but began to increase in 1986 as a result of the increased growth of Iowa's giant Canada goose population (Table 4.2). Canada goose harvests increased substantially after 1988, but were dampened in 1993 when restrictive Canada goose hunting regulations were implemented to reduce the harvest of Eastern Prairie Population (EPP) Canada geese. EPP geese nest on the west coast of Hudson Bay and are one of the two principle migrant Canada goose populations that fly through Iowa (the others are small Canada geese commonly called "hutchies" that nest on Baffin Island in the Arctic). The combination of restrictive hunting regulations, receding floodwaters, and large-scale participation in the Farm Service Agency's 0/92 program, resulted in a substantial decrease in Iowa's Canada goose harvest in 1993. Canada goose harvests began increasing in the mid 1990's, peaking at 61,000 in 2000. In 1996, a special 2-day September Canada goose season was implemented in north-central and northwest Iowa. During 1996-2000, the Canada goose harvest ranged from 6,300 to 16,700 during this special 2-day hunt.

The snow goose harvest in Iowa has declined since the early 1970's, despite record high numbers of light geese in the Flyway in the 1990's. Declining harvests resulted from shifting snow goose migration patterns, increased use of refuges, and large numbers of older geese in the population. By the mid 1990's, the mid-continent light goose population was severely damaging Arctic breeding habitats. To increase harvests of light geese, more liberal hunting regulations were implemented (liberal bag limits, 107-day seasons) and a conservation order was implemented to permit taking light geese after March 10. The harvest during the conservation order period in Iowa has ranged from 12,000 to 20,000 during 1999-2003. During the 1998-2002 regular light goose seasons, the harvest ranged from 600 to 15,000.

Waterfowl Seasons

Iowa waterfowlers have experienced a wide range of duck and goose seasons since the USFWS began

regulating waterfowl hunting in 1918 (Tables 4.3 and 4.4). Nearly every conceivable season-date combination has been tried in the past 80+ years. Duck hunting regulations are inherently complex because they involve many species, but the general lack of consistency in regulations, both at the federal and state levels, has made interpretation of their effects on duck harvests very difficult. Goose hunting regulations, on the other hand, have been less complex and more consistent. The relative secure goose breeding habitat, along with consistently conservative seasons and bag limits, have enabled goose populations to generally prosper. The growing giant Canada goose population, however, has complicated traditional Canada goose harvest management. It is particularly challenging to develop hunting regulations that will increase harvests of local giant Canada geese while, at the same time, limit harvests of migrant geese from Arctic and sub-Arctic regions.

Waterfowl Banding

Ducks and geese are captured and banded with leg bands to obtain information on survival rates, hunting mortality, migration patterns and timing, and relationships of harvest areas to production areas. Banding of some species is at the request of the USFWS, while others are banded for in-state programs. Both state and federal personnel band ducks in Iowa, but IDNR personnel band all the Canada geese and more than 90% of the wood ducks (Table 4.5). The USFWS, in concert with the Mississippi Flyway Council, determines banding priorities. In the 1960's emphasis was placed on banding blue-winged teal to evaluate special teal seasons. Winter mallard banding was conducted in the 1970's to supplement breeding grounds bandings and examine hen mortality during spring and summer. Wood duck bandings have been used to evaluate Iowa's September duck seasons. Wood duck banding is also important to measure the effects of hunting on wood duck populations, a necessity because direct counts are not feasible for wood ducks. The IDNR has consistently cooperated with USFWS and Mississippi Flyway Council banding programs and has one of the top wood duck banding programs in the nation, having banded over 10% of all the wood ducks banded in N. Am. in the last 10 years.

Canada goose banding has increased with the growth of our local giant Canada population. Migrant Canada geese have also been banded as part of cooperative projects with other states and provinces. Canada goose banding will be increasingly important as states and the USFWS attempt to assess the impacts of special harvest regulations on giant and migrant Canada goose populations.

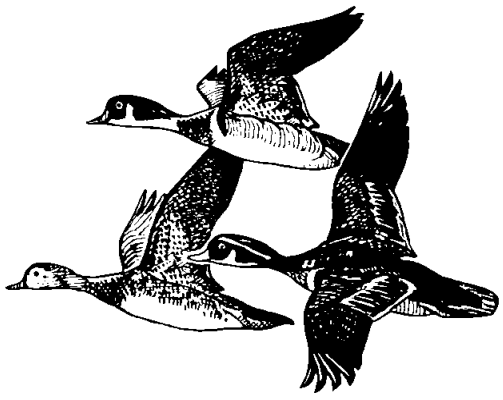


Table 4.1 Breeding population estimates for 10 species of ducks, 1955-present (in thousands). Source is USFWS.

YEAR	MALLARD	GAD-WALL	AMERICAN WIGEON	GREEN-WINGED TEAL	BLUE-WINGED TEAL	NORTHERN SHOVELER	NORTHERN PINTAIL	RED-HEAD	CANVAS-BACK	SCAUP
1976	7,894	1,245	2,476	1,536	4,747	1,756	5,475	668	610	5,779
1977	7,396	1,312	2,560	1,291	4,589	1,475	3,935	637	667	6,247
1978	7,353	1,561	3,286	2,194	4,471	1,978	5,106	738	369	5,936
1979	7,816	1,751	3,087	2,019	4,861	2,386	5,382	695	573	7,540
1980	7,570	1,391	3,558	1,994	4,884	1,902	4,514	753	727	6,314
1981	6,367	1,402	2,924	1,851	3,726	2,325	3,472	596	610	5,918
1982	6,254	1,637	2,440	1,543	3,657	2,141	3,709	617	510	5,468
1983	6,313	1,517	2,606	1,836	3,366	1,870	3,506	709	523	7,136
1984	5,247	1,532	2,987	1,361	3,956	1,620	2,969	673	520	6,909
1985	4,754	1,304	2,040	1,435	3,459	1,697	2,511	579	373	5,038
1986	6,836	1,540	1,732	1,682	4,463	2,118	2,737	560	437	5,204
1987	5,613	1,311	1,982	2,003	3,518	1,951	2,629	502	451	4,837
1988	6,331	1,349	2,194	2,058	3,975	1,680	2,011	441	436	4,684
1989	5,650	1,416	1,974	1,843	3,128	1,540	2,113	511	478	4,344
1990	5,452	1,672	1,860	1,790	2,776	1,759	2,257	481	539	4,294
1991	5,444	1,584	2,254	1,558	3,764	1,716	1,803	446	491	5,255
1992	5,976	2,033	2,208	1,773	4,333	1,954	2,098	596	482	4,639
1993	5,708	1,755	2,053	1,695	3,193	2,047	2,053	485	472	4,080
1994	6,980	2,318	2,382	2,108	4,616	2,912	2,972	654	526	4,529
1995	8,269	2,836	2,615	2,301	5,140	2,855	2,758	889	771	4,446
1996	7,941	2,984	2,273	2,459	6,416	3,449	2,736	834	849	4,250
1997	9,940	3,897	3,118	2,507	6,124	4,120	3,558	918	689	4,112
1998	9,640	3,742	2,858	2,087	6,399	3,183	2,521	1,005	686	3,472
1999	10,806	3,236	2,920	2,631	7,150	3,890	3,058	973	716	4,412
2000	9,470	3,158	2,733	3,194	7,431	3,521	2,908	926	707	4,026
2001	7,904	2,679	2,494	2,509	5,757	3,314	3,296	712	580	3,694
2002	7,504	2,235	2,334	2,334	4,207	2,138	1,790	565	487	3,524
2003	7,950	2,549	2,551	2,679	5,518	3,620	2,558	637	558	3,734
Percent Change in 2003 from:										
2002	6%	14%	9%	15%	31%	69%	43%	13%	15%	6%
1955-02 Av.	7%	55%	-2%	48%	24%	75%	-38%	2%	0%	-29%
1955-03 Statistics										
Average	7,423	1,659	2,607	1,830	4,489	2,104	4,106	626	559	5,215
Maximum	10,994	3,897	3,703	3,194	7,431	4,120	9,897	1,005	849	7,932
Minimum	4,754	454	1,706	700	2,776	1,183	1,790	319	354	3,472

Table 4.2 Selected Iowa waterfowl statistics on harvest, duck stamp sales, days hunted and average seasonal bag per active adult hunter, (1961-present). Preliminary data for 2001 and 2002 based on Harvest Information Program survey. Source is USFWS.

	DAYS AND HARVEST (1,000's)								FEDERAL	AVE.	ACTIVE
		WOOD	B-W	G-W	ALL	CANADA	SNOW	DAYS	DUCK	SEASON	ADULT
YEAR	MALLARD	DUCK	TEAL	TEAL	DUCKS	GEESE	GEESE	HUNTED	STAMPS	BAG	HUNTERS
1976	87.5	44.0	33.0	27.5	242.2	9.3	15.8	359.6	55,449	4.95	45,400
1977	138.7	37.9	17.0	38.7	280.0	7.8	29.1	407.3	57,143	5.32	46,200
1978	125.6	73.6	41.1	41.7	351.4	11.9	23.9	424.9	56,259	6.70	47,800
1979	183.3	77.8	69.2	38.0	441.0	10.0	43.2	496.7	49,845	9.49	44,400
1980	118.1	49.1	39.0	37.3	299.9	11.7	23.1	384.6	47,008	6.58	41,100
1981	130.2	54.3	34.6	27.7	301.1	10.2	23.1	371.5	41,648	7.89	35,900
1982	164.9	55.3	58.2	24.3	348.8	10.2	14.0	354.9	40,599	9.60	34,400
1983	115.2	47.3	74.0	27.8	324.2	11.5	16.5	310.4	40,381	8.49	34,000
1984	96.3	46.3	56.8	36.2	299.5	13.3	22.0	300.3	41,078	7.54	35,300
1985	62.0	37.4	41.5	22.6	199.8	10.4	8.5	241.4	33,304	6.83	27,900
1986	88.9	46.0	26.9	18.3	217.0	17.2	11.8	244.0	33,504	7.29	27,900
1987	64.8	36.1	14.2	20.1	161.1	15.1	3.6	207.0	30,248	6.04	25,500
1988	41.6	11.4	1.4	12.5	78.3	12.1	10.1	131.8	22,008	4.33	17,300
1989	32.2	17.0	2.9	17.9	87.8	20.2	4.4	127.5	21,686	4.68	16,600
1990	41.3	25.6	4.6	17.8	105.8	26.6	3.1	159.3	24,686	4.90	20,800
1991	63.1	39.4	6.6	13.3	154.2	29.3	8.1	196.7	24,989	6.78	21,400
1992	64.9	18.8	2.9	14.3	122.8	28.7	4.1	198.6	26,744	5.12	22,800
1993	52.7	22.2	4.1	7.9	100.9	17.3	9.5	176.5	25,640	4.69	21,092
1994	49.1	34.9	17.5	22.5	151.8	26.1	2.4	232.6	29,206	5.97	24,523
1995	86.1	49.2	38.9	23.7	242.3	48.0	4.6	280.2	30,282	8.19	25,792
1996	90.6	42.5	36.2	31.0	244.7	59.5	5.4	284.2	30,945	7.91	26,338
1997	71.2	52.1	54.5	32.7	272.0	52.2	15.2	338.3	36,062	8.29	30,737
1998	99.6	36.0	47.7	41.9	281.9	33.2	15.6	292.8	30,864	9.93	27,454
1999	55.9	35.8	41.9	17.4	176.7	33.0	12.5	271.9	32,419	7.17	27,024
2000	74.2	39.9	25.3	25.4	209.6	61.0	0.6	288.4	30,951	8.18	26,693
2001	117.2	45.5	49.3	29.7	296.4	58.1	5.2	203.5	32,090	11.90	25,000
2002	97.2	44.5	50.6	43.0	287.2	67.1	1.1	185.7	30,806	12.30	23,300
Percent Change in 2002 From:											
2001	-17%	-2%	3%	45%	-3%	15%	-78%	-9%	-4%	3%	-7%
1961-01 Av.	5%	20%	59%	68%	27%	246%	-94%	-40%	-25%	92%	-33%
1961-02 Statistics											
Average	92.7	37.3	32.2	26.1	228.4	20.5	17.9	306.4	40,743	6.5	34,327
Maximum	183.3	77.8	74.0	45.2	441.0	67.1	48.3	536.5	68,401	12.3	58,700
Minimum	21.3	6.8	0.4	5.6	45.1	4.3	0.6	127.5	21,686	2.1	16,600

Table 4.3 Iowa's duck and coot seasons, 1917 to present.

YEAR	SEASON LENGTH	SEASON DATES		SHOOTING HOURS	LIMITS DUCK BAG/POSS	LIMITS COOT BAG/POSS	
		NORTH ZONE (2)	SOUTH ZONE (2)				
1987	40	Sep 19-23	Sep 19-21	1/2 SR to SS	PS *ad	15 /30	
(*SH)		Oct 17 - Nov 20	Oct 24 - Nov 29				
1988	30	Oct 8 - 9	Oct 22 - 28	SR to SS	3 / 6 *ae	15 /30	*ae) Only 2 Ma (1 Hn), 2 Wd, 1 Pt, 1 Rh,1 Bd.
		Oct 22 - Nov 18	Nov 5 - 27				5 merg., only 1 Hm. Closed sea. on Cb.
1989	30	Oct 7 - 8	Oct 21 - 27	SR to SS	3 / 6 *ae	15 /30	
		Oct 21 - Nov 17	Nov 4 - 26				
1990	30	Oct 6 - 7	Oct 20 - 26	1/2 SR to SS	3 / 6 *ae	15 /30	
		Oct 20 - Nov 16	Nov 3 - 25				
1991	30	Oct 5 - 6	Oct 19 - 25	1/2 SR to SS	3 / 6 *ae	15 /30	
		Oct 19 - Nov 16	Nov 9 - Dec 1				
1992	30	Oct 10 - 13	Oct 24 - 30	1/2 SR to SS	3 / 6 *ae	15 /30	
		Oct 24 - Nov 18	Nov 7 - 29				
1993	30	Oct 2 - 4	Oct 23 - 29	1/2 SR to SS	3 / 6 *ae	15 /30	
		Oct 23 - Nov 18	Nov 6 - 28				
1994	40	Sept 17 - 19	Oct 1 - 3	1/2 SR to SS	3 / 6 *af	15 /30	*af) Only 2 Ma (1 Hn), 2 Wd, 1 Pt, 1 Rh,1 Bd, 1 Cb.
		Oct 15 - Nov 20	Oct 22 - Nov 27				5 merg., only 1 Hm.
1995	50	Sept 23 - 27	Sept 23 - 25	1/2 SR to SS	5 /10 *ag	15 /30	*ag) Only 4 Ma (1 Hn), 2 Wd, 1 Pt, 1 Rh,1 Bd, 1 Cb.
		Oct 15 - Nov 28	Oct 21 - Dec 6				5 merg., only 1 Hm.
1996	50	Sept 21 - 25	Sept 21 - 23	1/2 SR to SS	5 /10 *ah	15 /30	*ah) Only 4 Ma (1 Hn), 2 Wd, 1 Pt, 2 Rh,1 Bd, 1 Cb.
		Oct 19 - Dec 2	Oct 19 - Dec 4				5 merg., only 1 Hm.
	Youth Day	Oct 5	Oct 5	1/2 SR to SS	5 /10 *ah		
1997	60	Sept 20 - 24	Sept 20 - 24	1/2 SR to SS	6 /12 *ai	15 /30	*ai) Only 4 Ma (2 Hn), 2 Wd, 3 Pt, 2 Rh,1 Bd, 1 Cb.
		Oct 11 - Dec 4	Oct 18 - Dec 11				5 merg., only 1 Hm.
	Youth Day	Sept 27	Sept 27	1/2 SR to SS	6 /12 *ai	15 /30	
1998	60	Sept 19 - 23	Sept 19 - 23	1/2 SR to SS	6 /12 *aj	15 /30	*aj) Only 4 Ma (2 Hn), 2 Wd, 1 Pt, 2 Rh,1 Bd, 1 Cb.
(*HIP)		Oct 10 - Dec 3	Oct 17 - Dec 10				5 merg., only 1 Hm.
	Youth Day	Sept 26	Sept 26	1/2 SR to SS	6 /12 *aj	15 /30	
1999	60	Sept 18 - 22	Sept 18 - 22	1/2 SR to SS	6 /12 *ak	15 /30	*ak) Only 4 Ma (2 Hn), 2 Wd, 1 Pt, 2 Rh,1 Bd, 1 Cb
		Oct 16 - Dec 9	Oct 16 - Dec 9				& 3 Sc. 5 merg., only 1 Hm.
	Youth Day	Oct 9	Oct 9	1/2 SR to SS	6 /12 *ak	15 /30	
2000	60	Sept 23 - 27	Sept 23 - 27	1/2 SR to SS	6 /12 *ak	15 /30	
		Oct 14 - Dec 7	Oct 14 - Dec 7				
	Youth Day	Oct 7 - 8	Oct 7 - 8	1/2 SR to SS	6 /12 *ak	15 /30	
2001	60	Sept 22 - 26	Sept 22 - 26	1/2 SR to SS	6 /12 *ak	15 /30	
		Oct 13 - Dec 6	Oct 13 - Dec 6				
	Canvasback	Oct. 27 - Nov 15	Nov 17 - Dec 6				
	Youth Day	Oct 6 - 7	Oct 6 - 7	1/2 SR to SS	6 /12 *ak	15 /30	
2002	60	Sept 21 - 25	Sept 21 - 23	1/2 SR to SS	6 /12 *al	15 /30	*al) Only 4 Ma (2 Hn), 2 Wd, 1 Pt, 2 Rh,1 Bd,
		Oct 12 - Dec 5	Oct 19 - Dec 14				& 3 Sc. 5 merg., only 1 Hm. Closed sea. on Cb
	Pintail	Sept 21 - 25	Sept 21 - 23				
		Oct 12 - Nov 5	Oct 19 - Nov 14				
	Youth Day	Oct 5 - 6	Oct 5 - 6	1/2 SR to SS	6 /12 *al	15 /30	

DUCK SPECIES: Ma = Mallard, Wd = Wood duck, Bd = Black duck, Cb = Canvasback, Rh = Redhead, Ru = Ruddy duck, Bu = Bufflehead,
Pt = Pintail, Wg = Wigeon, Sc = Scaup, Rn = Ring-necked duck Bt = Blue-winged teal, Gt = Green-winged teal,
Ga = Gadwall, Sh = Shoveler, Ct = Cinnamon teal, Md = Mottled duck, (Hn = Hen, Dr = Drake)
Cm = Common merganser, Rm = Red-breasted merganser, Hm = Hooded merganser

SHOOTING HOURS: SR to SS = sunrise to sunset, 1/2 SR to SS = 1/2 hour before sunrise to sunset, 1/2 SR to 1/2 SS = 1/2 hour before sunrise to 1/2 hour before sunset, 1/2 SR to 1 SS = 1/2 hour before sunrise to 1 hour before sunset.
Shooting hours began at 12:00 noon on opening day for hunting seasons 1931-33, 1947-54, & 1959-63.
Iowa set daily shooting hours at sunrise or later during 27 of the 72 hunting seasons between 1918-89.
Federal regulations set daily shooting hours at sunrise or later during 16 of the 72 hunting seasons between 1918-89.

LIMIT: BAG = Daily bag limit, POSS = Possession limit

POSS LIMIT = Twice the daily bag limit unless otherwise noted.

PS = Point System used to determine bag limit; daily bag obtained when the point value of the last duck taken, added to the point values of the previous ducks bagged, reaches or exceeds 100 points.

SPEC. REGULATIONS: Wood duck season closed by Fed. regulation from 1918 through the 1940 season.
Canvasback and redhead season were closed on the Mississippi River from 1975 thru 1979.
Canvasback season was closed on the Mississippi River in 1980-82.
Canvasback season closed on Pools 9 & 19 on the Mississippi River from 1983-85.
Canvasback season closed statewide 1936-37, 1960-63, 1972, 1986-93.

DUCK ZONE BOUNDARY (1) = a line running from the Nebraska-Iowa border along I-80 to the Iowa-Illinois border.

DUCK ZONE BOUNDARY (2) = a line running from the Nebraska-Iowa border along State Hwy 175, east to State Hwy 37, southeast to U.S. Hwy 59, south to I-80 and along I-80 to the Iowa-Illinois border.

(*SH) Steel shot required statewide for hunting all migratory gamebirds except woodcock.

STEEL SHOT REGULATIONS HISTORY:

In 1977, no person could hunt waterfowl on all waters and a 150 yard zone thereto in Fremont and Mills Counties while possessing 12 gauge shotshells loaded with any shot other than steel. Drainage ditches, temporary sheet water and the Missouri River were exempt.

During 1978 & 1979, no person could hunt waterfowl on all waters and a 150 yard zone thereto in Fremont and Mills Counties and on the Upper Mississippi Wildlife Refuge while possessing 12 gauge shotshells loaded with any shot other than steel. Drainage ditches, temporary sheet water, and the Missouri River in Mills and Fremont Counties were exempt.

In 1980, Sweet Marsh in Bremer County, Big Marsh in Butler County, and the Princeton Area in Scott County, were added to the areas previously described in the steel shot regulations and the rule now applied to all shotgun gauges.

In 1981, Green Island in Jackson County was added to the list of areas previously described where steel shot was required.

During the 1982 through 1984 seasons, the previously described list of areas for steel shot remained the same.

During the 1985 & 1986 seasons, no person could hunt migratory game birds except woodcock on any lands or waters under the jurisdiction of the State Conservation Commission, the U.S. Government, or any county conservation board, or on all waters and a 150 yard zone adjacent to these waters, including reservoirs, lakes, ponds, marshes, bayous, swamps, rivers, streams, and seasonally flooded areas of all types, while possessing shotshells loaded with shot other than steel shot. Temporary sheet water, farm ponds less than 2 acres in size, and streams with water less than 25 feet in width where the hunting was occuring were exempt. In addition, no person could hunt waterfowl in the zone bounded on the west by the Missouri River, on the south by I-680, on the east by I-29 and on the north by the Soldier River, while possessing any shotshells loaded with shot other than steel shot.

From 1987 to the present, no person could hunt migratory game birds except woodcock on all lands and waters within the State of Iowa while possessing any shotshell loaded with shot other than steel shot, or copper or nickle coated steel shot.

In 1998, nontoxic shot was required for any shotgun shooting (except turkey hunting) on most DNR managed wildlife areas in Iowa's prairie pothole region that had waterfowl production potential.

(*HIP) First year migratory bird hunters in Iowa registered (by phone) for the federal Harvest Information Program (HIP).

Table 4.4 Iowa's goose seasons, 1917 present.

YEAR	GOOSE SPECIES	SEASON LENGTH	SEASON DATES		SHOOTING HOURS	LIMIT BAG/POSS	COMMENTS
			NORTH ZONE	**SOUTH ZONE**			
1993	Ca/Wf/Br	55	Oct 9 - Dec 2	Oct 23 - Dec 16	1/2 SR to SS	2 / 4 *j	
	Sn	80	Oct 9 - Dec 27	Oct 23 - Jan 10, 1994		7 /14 *j	
1994	Ca/Wf/Br	55	Oct 8 - Dec 1	Oct 22 - Dec 15	1/2 SR to SS	2 / 4 *j	
	Sn	102	Oct 1 - Dec 10	Oct 1 - Jan 10, 1995		7 /14 *j	
1995	Ca/Wf/Br	70	Sep 30 - Dec 8	Oct 14 - Dec 22	1/2 SR to SS	2 / 4 *k	*k) Bag lim.= 10 w/ only 2 Ca & 2 Wf.
	Sn	107	Sep 30 - Jan 10	Oct 14 - Jan 10, 1996		10 /20 *k	Pos lim.= 20 w/ only 4 Ca & 4 Wf.
			None	Feb 24 - Mar 10, 1996 south of Interstate 80.			
1996	Ca	2	Sep 14 - 15	None	1/2 SR to SS	2 / 4 *l	*l) Bag lim.= 2 Ca.
	Ca/Wf/Br	70	Sep 28 - Dec 6	Oct 5 - Oct 13	1/2 SR to SS	2 / 4 *m	*m) Bag lim.= 2 Ca , 2 Wf, & 2 Br .
				Oct 19 - Dec 18			Pos lim.= 4 Ca, 4 Wf, & 4 Br.
	Sn	107	Oct 12 - Jan 10, 1997		1/2 SR to SS	10 /30	
			Feb 22 - Mar 9, 1997				
1997	Ca	2	Sep 13 - 14	None	1/2 SR to SS	2 / 4 *l	
	Ca/Wf/Br	70	Oct 4 - Dec 12	Oct 4 - Oct 12	1/2 SR to SS	2 / 4 *m	
				Oct 18 - Dec 17			
	Sn/Ro	107	Oct 4 - Dec 31		1/2 SR to SS	10 /30	
			Feb 21 - Mar 10, 1998				
1998	Ca	2	Sep 12 - 13	None	1/2 SR to SS	2 / 4 *l	
(*HIP)	Ca/Wf/Br	70	Oct 3 - Dec 11	Oct 3 - Oct 11	1/2 SR to SS	[a] 2 / 4 *m	
				Oct 17 - Dec 16			
	Sn/Ro	107	Oct 3 - Dec 31		1/2 SR to SS	20 /none	
			Feb 20 - Mar 10, 1999				
	Sn/Ro	[b]Cons. Or.	March 11-April 16, 1999		1/2 SR to SS1/2	20 /none	
1999	Ca	2	Sep 11 - 12	None	1/2 SR to SS	2 / 4 *l	
	Ca/Wf/Br	70	Oct 2 - Dec 10	Oct 2 - Oct 10	1/2 SR to SS	2 / 4 *m	
				Oct 16 - Dec 15			
	Sn/Ro	107	Oct 2 - Dec 26		1/2 SR to SS	20 /none	
			Feb 19 - Mar 10, 2000				
	Sn/Ro	[b]Cons. Or.	March 11-April 16, 2000		1/2 SR to SS 1/2	20 /none	
2000	Ca	2	Sep 9 - 10	None	1/2 SR to SS	2 / 4 *l	
	Ca/Wf/Br	70	Sep 30 - Dec 8	Sep 30 - Oct 15	1/2 SR to SS	2 / 4 *m	
				Nov 4 - Dec 27			
	Sn/Ro	107	Sep 30 - Jan 14, 2001		1/2 SR to SS	20 /none	
	Sn/Ro	[b]Cons. Or.	Feb 15 - April 15, 2001		1/2 SR to SS 1/2	20 /none	
2001	Ca/Wf/Br	70	Sep 29 - Dec 7	Sep 29 - Oct 21	1/2 SR to SS	2 / 4 *m	
				Nov 10 - Dec 26			
	Sn/Ro	107	Sep 29 - Jan 13, 2002		1/2 SR to SS	20 /none	
	Sn/Ro	[b]Cons. Or.	Feb 2 - April 15, 2002		1/2 SR to SS 1/2	20 /none	
2002	Ca/Wf/Br	70	Sep 28 - Dec 6	Sep 28 - Oct 20	1/2 SR to SS	2 / 4 *m	
				Nov 9 - Dec 25			
	Sn/Ro	107	Sep 28 - Jan 12, 2003		1/2 SR to SS	20 /none	
	Sn/Ro	[b]Cons. Or.	Feb 1 - April 15, 2003		1/2 SR to SS 1/2	20 /none	

GOOSE SPECIES: Ca = Canada goose, Sn = Snow goose, Wf = White-fronted goose, Br = Brant

SHOOTING HOURS: SR to SS = sunrise to sunset, 1/2 SR to SS = 1/2 hour before sunrise to sunset, 1/2 SR to 1/2 SS= 1/2 hour before sunrise to 1/2 hour before sunset, 1/2 SR to 1 SS = 1/2 hour before sunrise to 1 hour before sunset. 1/2 SR to SS/1 = 1/2 hour before sunrise to sunset in all of state except SW Zone where shooting hours were 1/2 hour before sunrise to 1:00 PM until Dec. 1 in 1991 and until Nov. 29 in 1992, then 1/2 hour before sunrise to sunset thereafter. 1/2 SR to SS 1/2 = 1/2 hour before sunrise to 1/2 hour after sunset.

LIMIT: BAG = Daily bag limit, POSS = Possesion limit

SW ZONE (1) = that portion of the state south and west of a line running from the Iowa-Missouri state line along US Hwy 71 to state Hwy 92 and west on Hwy 92 to the Nebraska-Iowa border.

SW ZONE (2) = that portion of the state south and west of a line running from the Iowa-Missouri state line along U.S. Hwy 71 to I-80, west on I-80 to U.S. Hwy 59, north on U.S. Hwy 59 to State Hwy 37, then NW on Hwy 37 to State Hwy 175, and west on Hwy 175 to the Nebraska-Iowa border.

NORTH/SOUTH GOOSE ZONE BOUNDARY = a line running from the Nebraska-Iowa border along state Hwy 175, southeast to State Hwy 37, east to U.S. Hwy 59, south to I-80, and along I-80 to the Iowa-Illinois border. This was the same border used to divide the north and south duck zones in 1993.

(*SH) Steel shot required statewide for hunting all migratory gamebirds except woodcock.
See Iowa's Duck and Coot Seasons for a complete history of steel shot regulations in Iowa.

(*HIP) First year migratory bird hunters in Iowa registered (by phone) for the federal Harvest Information Program (HIP).

SPECIAL REGULATIONS: Ross's goose season closed by Fed. regulations from 1942-61.

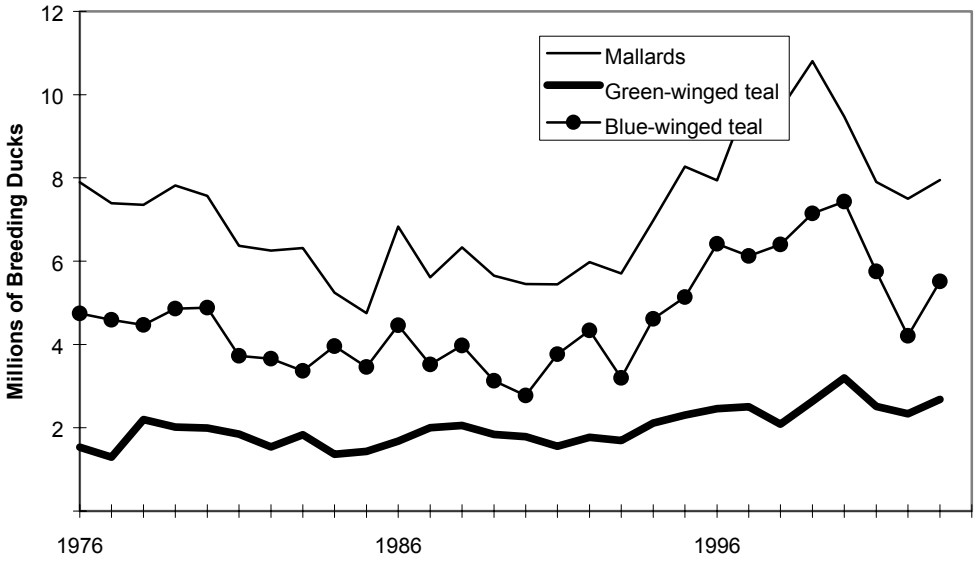
[a] The daily limit was 2 Canada geese through Oct. 31 and 1 thereafter except in the south zone where it was 2 after Nov. 30.

[b] A conservation order was issued by the USFWS to permit the taking of light geese (snow + ross) after March 10.
Hunters could use electronic calls and unplugged shotguns and hunt until 1/2 hour after sunset.
Hunters had to be fully licensed to hunt waterfowl in Iowa (no Fed. Mig. Bird stamp) and registered with HIP.

Table 4.5 Waterfowl banded in Iowa, 1964 to the present.
(Numbers include both state and federal bandings.)

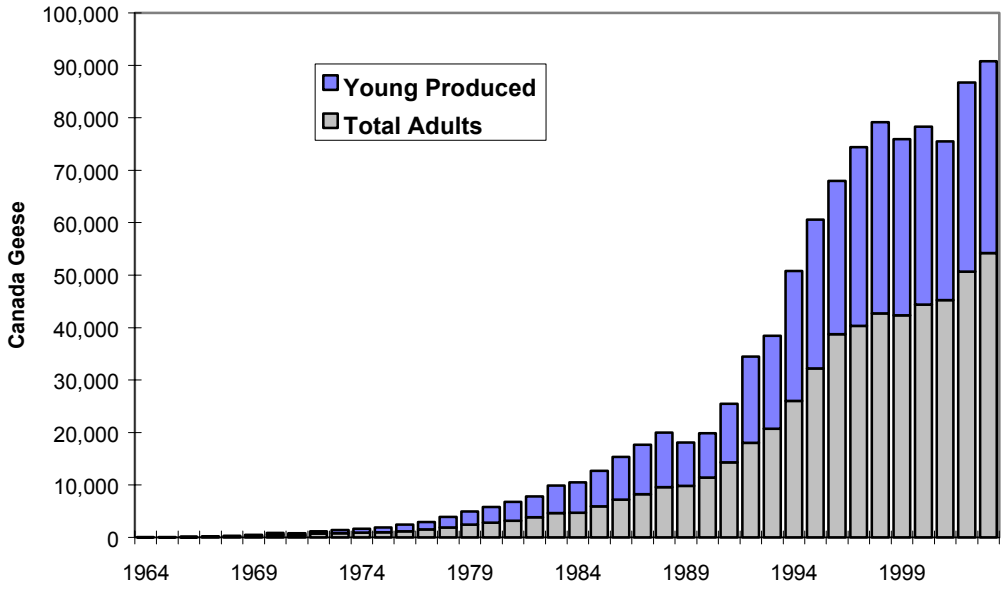
Year	Canada Geese	Mallards	Wood Ducks	Blue-winged Teal	Trumpeter Swans	Other species	Total
1964	51	440	488	6,046		273	7,298
1965	32	533	571	4,485		120	5,741
1966	61	504	564	3,836		172	5,137
1967	66	1,928	410	4,022		113	6,539
1968	91	1,809	315	3,716		63	5,994
1969	53	2,282	414	1,634		135	4,518
1970	143	2,368	935	2,649		236	6,331
1971	301	1,901	1,644	1,395		330	5,571
1972	148	672	1,381	1,000		127	3,328
1973	410	1,022	1,665	601		115	3,813
1974	268	522	1,333	638		34	2,795
1975	222	563	2,026	248		164	3,223
1976	544	3,165	1,620	334		19	5,682
1977	799	678	1,261	223		25	2,986
1978	633	4,418	1,765	1,022		98	7,936
1979	409	4,683	1,490	509		3	7,094
1980	775	2,175	1,302	1,880		85	6,217
1981	736	350	1,523	919		86	3,614
1982	975	99	2,747	26		1	3,848
1983	1,444	446	2,411	35		3	4,339
1984	1,293	110	2,489	38		6	3,936
1985	1,710	389	1,953	30		1	4,083
1986	1,847	383	2,623	18		3	4,874
1987	2,127	380	2,199	98		8	4,812
1988	2,421	349	2,115	37		2	4,924
1989	1,712	70	2,636	0		0	4,418
1990	1,556	13	1,908	64		0	3,541
1991	1,880	151	4,874	0		0	6,905
1992	2,043	392	3,776	0		13	6,224
1993	2,538	130	2,931	0		1	5,600
1994	3,737	146	3,631	0		0	7,614
1995	3,671	221	6,717	0		0	10,609
1996	3,809	263	4,188	0		0	8,260
1997	4,852	77	4,375	0		0	9,304
1998	4,462	292	4,837	0	58	0	9,649
1999	6,073	229	4,669	0	46	0	10,971
2000	2,971	133	2,380	0	90	0	5,574
2001	2,942	60	3,711	0	78	0	6,791
2002	3,479	338	3,146	207	68	0	7,238
Totals	63,284	34,684	91,023	35,710	340	2,236	227,331
10-year Average	3,853	189	4,059	21	68	0	8,161

Figure 4.1 Breeding populations of important ducks to Iowa.



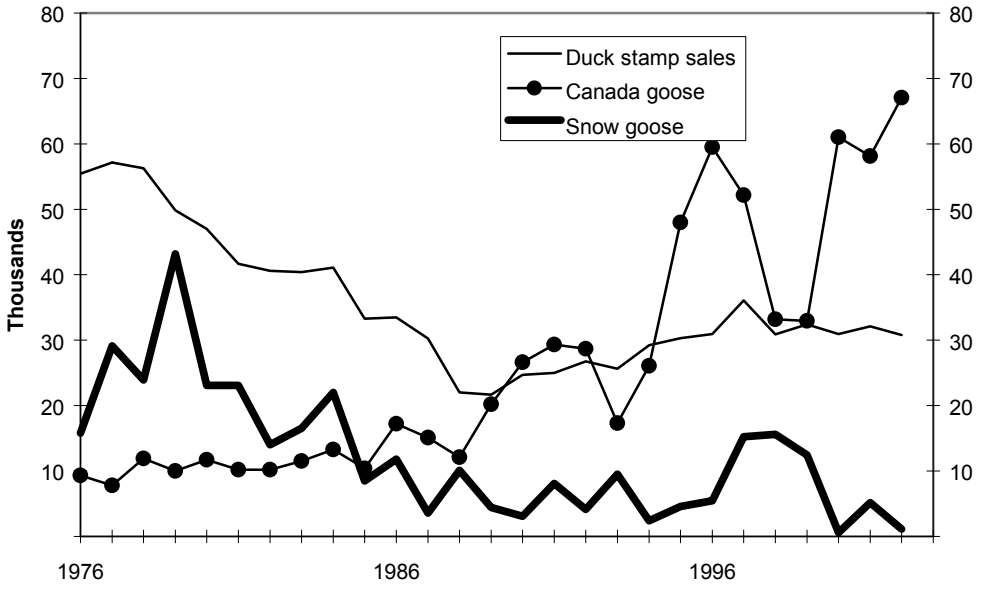
Source: USFWS

Figure 4.2 Iowa's giant Canada goose population.



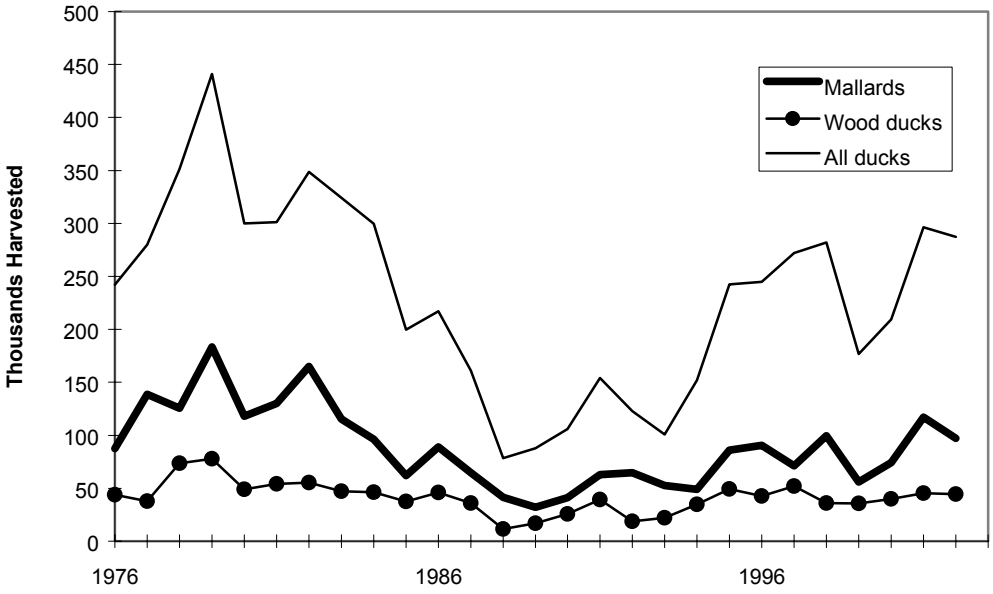
Source: Iowa DNR

Figure 4.3 Goose harvest & duck stamp sales in Iowa (1961 -present).



Source: USFWS

Figure 4.4 Duck harvest in Iowa (1961 - present)



Source: USFWS